

July 1, 1999

Hon. Thomas F. Birmingham

Senate President

Room 332

State House

Boston, MA 02133

Hon. Thomas M. Finneran

Speaker of the House

Room 356

State House

Boston, MA 02133

Dear President Birmingham and Speaker Finneran:

In response to the legislative resolutions on area code conservation in Eastern Massachusetts, the Department of Telecommunications and Energy submits the enclosed report to the Legislature. Should you have any questions regarding this report, please contact me.

Sincerely,

Janet Gail Besser, Chair

JGB/kjr

cc: Sen. Michael Morrissey (w/enc.)

Rep. Dan Bosley (w/enc.)

Rep. Rachel Kaprielian (w/enc.)

Sen. Cheryl Jacques (w/enc.)

Sen. Steven Tolman (w/enc.)

**REPORT OF THE DEPARTMENT OF TELECOMMUNICATIONS AND
ENERGY**

**TO THE LEGISLATURE FOR THE COMMONWEALTH OF
MASSACHUSETTS**

I. INTRODUCTION

On February 11, 1999, and on February 24, 1999, the Senate and the House of Representatives of the Commonwealth of Massachusetts, respectively, issued resolutions (collectively, "Resolutions") to Governor Cellucci and to the Department of Telecommunications and Energy ("Department") asking the Department to investigate number conservation measures for area codes in Eastern Massachusetts. The Senate and House asked the Department to (1) investigate the feasibility of adopting number conservation measures in order to prevent the further addition of area codes in Massachusetts, (2) investigate the merits of rate center consolidation ("RCC"),⁽¹⁾ virtual pooling, and number assignment guidelines, (3) examine all available remedies in order to prevent the need for new area codes, (4) explore the adoption of number conservation measures as part of the final area code settlement, and (5) report the findings to date of said investigation to the Legislature. This report presents an overview of the Department's findings to date and summarizes the Department's investigation into area code conservation in the docket, Area Code Conservation, D.T.E. 98-38.

II. REPORT OVERVIEW

1. Background

On January 23, 1997, the Department ordered a geographic split of the 508 and 617 area codes to create two new area codes, 781, and 978, to be fully implemented beginning May 1, 1998. Although these new area codes were expected to alleviate the need for further area code relief for several years, Lockheed Martin CIS ("Lockheed"), the North American Numbering Plan Administration ("NANPA") code administrator, notified the Department on March 4, 1998, that, because of an unexpectedly high demand for new exchange codes, the supply of exchange codes in the 508 and 617 area codes was again in jeopardy of being exhausted. On April 24, 1998, the Department opened an investigation into exchange code conservation measures to evaluate ways to delay the need to introduce new area codes in Massachusetts (D.T.E. 98-38). In the order opening this investigation, the Department stated that it would address three issues: (1) where and how the existing telephone numbers have been used; (2) whether measures could be implemented to conserve exchange codes within Eastern Massachusetts; and (3) whether there is a need for area code relief at this time. The Department also stated that it would look at the related issues of (1) the rationing process used for assigning the remaining exchange codes in the 508 and 617 area codes, and (2) the process by which Bell Atlantic-Massachusetts activates exchange codes in the new 781 and 978 area codes. On May 12, 1998, Lockheed notified the Department that the new 781 and 978 area codes were also in a jeopardy condition. On January 11, 1999, the Department opened the relief docket, Area Code Relief, D.T.E. 99-11, to gather public comment and to investigate the relief plans proposed by Lockheed.

2. Lockheed Revised the Area Code Exhaust Dates to 2001

On May 3, 1999, Lockheed announced that the exhaust dates for the 508 and 617 area codes were extended up to a year due to the return of 164 exchange codes from Level 3 Communications in March 1999, acting at the Department's request.⁽²⁾ On May 26, 1999, Lockheed released its updated projected exhaust dates: 508 area code in second quarter 2001, 617 area code in first quarter 2001, 781 area code in second quarter 2001, and 978 area code in third quarter 2001.⁽³⁾ Lockheed revised the exhaust dates for the Massachusetts area codes assuming that the telecommunications industry in Massachusetts maintains the current rationing procedures.⁽⁴⁾ The Department does not control the rationing procedures; rather, Lockheed determines the procedures to be used based on Industry consensus. On May 4, 1999, the Department issued a letter to the Industry urging the carriers to retain the current rationing system and to return more unused exchange codes. On May 10, 1999, the Department sent a supplemental request to the FCC, which has oversight authority over rationing procedures, asking the FCC to require Lockheed to maintain the current rationing system.

Lockheed recently conducted a study in which it predicts that all area codes in North America will be exhausted by the year 2008, based on recent demand growth rates and predicted future demand for area codes. North American Numbering Plan Exhaust Study at 2-1 (rel. April 22, 1999). NANPA also predicted in this study that implementing thousand block number pooling could extend the exhaust date for all area codes to the year 2094. If thousand block number pooling were implemented, all carriers would be assigned numbers in blocks of 1,000, rather than 10,000 as is currently done. During its May 27, 1999, monthly open meeting, the FCC issued a Notice of Proposed Rulemaking ("May 27, 1999 NPRM") to determine whether to require thousand block number pooling on a nationwide scale, as well as other issues.⁽⁵⁾

The time gained by the Level 3 return of unused exchange codes will give the Department additional time to investigate code conservation measures, including rate center consolidation and voluntary conservation methods, with an eye towards further forestalling new area codes in Eastern Massachusetts.

3. The FCC Pennsylvania Ruling Restricts State Commission Authority on

Code Conservation

One of the most significant events since the opening of D.T.E. 98-38 on April 24, 1998, was the issuance of an order by the FCC on September 28, 1998, known as the "Pennsylvania Ruling".⁽⁶⁾ In the Pennsylvania Ruling, the FCC held that states, through their state public utility commissions, are authorized to order rationing of exchange codes, or NXX codes,⁽⁷⁾ and other code conservation measures like virtual pooling⁽⁸⁾ only (1) after an area code relief plan has been implemented, and (2) where the state's telecommunications industry has not reached a consensus on an exchange code rationing plan.

This FCC ruling has restricted greatly the Department's ability to implement most code conservation methods, including the virtual pooling plan submitted by the Attorney

General in D.T.E. 98-38. The Department was considering virtual pooling and other code conservation measures when the FCC, in the Pennsylvania Ruling, prohibited the Department from moving forward without prior FCC approval.⁽⁹⁾ The FCC did allow states to investigate and order rate center consolidation without prior FCC approval. In response, the Department shifted its focus in our area code conservation docket to (1) investigating RCC and other code conservation methods, (2) encouraging voluntary code conservation, and (3) pursuing additional delegation of authority from the FCC to conserve exchange codes.

4. The Department Investigates Rate Center Consolidation

The Department proceeds with its conservation investigation now focused on RCC. The Department has conducted extensive discovery and held a public hearing and technical sessions in this docket. The Attorney General has proposed two RCC plans, the Regional Call Plan and the Single Rate Center Plan. The Regional Call Plan would consolidate the existing 203 rate centers in Eastern Massachusetts into 25 regions. The Single Rate Center Plan would consolidate the 203 rate centers into one rate center which contains all of Eastern Massachusetts. The Department and parties to D.T.E. 98-38 are exploring the potential effects of those plans on exchange code conservation and rate structures.

Significant additional investigation is needed because of the complexity of RCC and its potential impact on rates paid by Bell Atlantic retail customers. The additional time created by the return of unused exchange codes will allow the Department to investigate RCC more thoroughly, including allowing Bell Atlantic to conduct a study of the feasibility of RCC and its implications. Bell Atlantic will conduct a feasibility study of the Attorney General's RCC plans and will report its findings to the Department by September 24, 1999.

5. The Department Petitions the FCC for Additional Authority

In addition to the petition for reconsideration of the Pennsylvania Ruling, the Department has filed two more petitions with the FCC for code conservation authority and has filed supporting comments on several petitions for code conservation authority filed by other state public utility commissions. On February 12, 1999, the Department filed a petition with the FCC for additional authority to impose a technology-specific overlay.⁽¹¹⁾ On February 17, 1999, the Department filed a petition with the FCC for additional authority to:

- (1) Reclaim unused and reserved exchange codes,

- (2) Maintain the current central office code rationing measures for at least six months after implementation of all the area code relief plans,
- (3) Revise rationing procedures,
- (4) Hear and address claims of carriers seeking additional codes outside of the rationing plan,
- (5) Set code allocation standards,
- (6) Institute thousands block number pooling,
- (7) Implement extended local calling areas,
- (8) Implement inconsistent rate centers, and
- (9) Implement unassigned number porting.⁽¹²⁾

The Department continues to pursue these petitions and has filed comments supporting the petitions of other state commissions for additional code conservation authority.⁽¹³⁾ The Department's petitions, along with similar petitions proposed by California, Maine, New York, Connecticut, and Florida, were discussed during the FCC's May 27, 1999 open meeting, during which the FCC issued a Notice of Proposed Rulemaking ("NPRM").⁽¹⁴⁾

On Friday, June 18, 1999, a delegation of commissioners and staff from the Department met with members of the FCC and Massachusetts' Congressional delegation in Washington, D.C., on issues concerning area codes, numbering issues, and the Department's petitions to the FCC for code conservation authority. The Massachusetts delegation met the FCC commissioners and staff in combined sessions with commissioners and staff from the New Hampshire, Vermont, and Maine public service commissions.

The New England delegation requested the FCC Commission and its Common Carrier Bureau ("CCB") to act quickly on Massachusetts' area code petitions and to allow state commissions to implement code conservation measures designed to avoid the inefficient use of telephone numbers. The delegation emphasized that timing was critical and that FCC action on its May 27, 1999, NPRM would come too late for several New England states. The delegation urged the FCC to act quickly on some form of interim delegation of authority to the states while the NPRM is pending. The delegation's requests were well-received by both the FCC Commission and the CCB staff.

The New England delegation's meetings began with Commissioner Harold Furchtgott-Roth and legal advisor Kevin Martin from 10:15 - 11:00, and Commissioner Susan Ness and legal advisor Linda Kenny from 11:00 - 12:00. From 12:00 - 12:30 p.m., the Massachusetts delegation met with Congressional staff assistants from the offices of Senator Kennedy, Senator Kerry, Congressman Markey, Congressman Olver, and Congressman Tierney. Chair Besser and Commissioner Vasington urged the Congressional delegation to support the Department's code conservation petitions before the FCC and to support Senate Bill 765, sponsored by Sen. Susan Collins (D-ME), which delegates code conservation authority to the states if the FCC does not revise the current code allocation methods.

After lunch, the Massachusetts delegation joined the remaining New England delegation and met with Commissioner Gloria Tristani and legal advisor Sarah Whitesell from 1:30 - 2:00; Commissioner Michael Powell's legal advisor Kyle Dixon from 2:00 - 2:45; CCB staff members Yog Varma (Deputy Bureau Chief), Blaise Scinto (deputy chief, Network Services Division), and Network Services Division line attorneys Jared Carlson, Pat Forster, and Tejal Mehta from 2:45 - 4:00; and Chairman William Kennard and legal advisor Dorothy Atwood from 4:00 - 4:45 p.m.

6. The Department Asks Carriers to Voluntarily Return Exchange Codes

The Department issued a request to all Massachusetts Exchange Code Holders ("Code Holders") on February 18, 1999, to reevaluate their upcoming needs for exchange codes and to voluntarily return unused exchange codes. Two carriers have voluntarily returned blocks of unused NXX codes as requested by the Department: Level 3 Communications (formerly XCOM Technologies) and LBC Telephony. LBC Telephony, in February 1999, agreed to return 60 exchange codes (600,000 phone numbers) in the 781 and 978 area codes. The Department estimates this return will extend the lives of the 781 and 978 area codes for several months. As already mentioned, Level 3 returned 164 exchange codes, which extended the 508, 781, and 978 area codes from 2000 to 2001. Because voluntary return, while beneficial, is not as effective as mandatory return, the Department petitioned the FCC for authority to order unused numbers to be returned to the code administrator and to evaluate the efficiency of a carrier's use of the numbers.

7. The Department Investigates Other Code Conservation Measures

In addition to investigating rate center consolidation and virtual pooling, the Department has been investigating the merits of other code conservation measures, including unassigned number porting ("UNP"). UNP allows a code administrator to make one carrier's individual unassigned numbers in an NXX code available to another carrier. UNP allows sharing of the many unassigned numbers within existing NXX codes that do not fall within free 1,000 blocks. Carriers have advised the Department that UNP works only if all carriers are equipped for local number portability ("LNP"). Where LNP is available, a customer can switch carriers while retaining the original telephone number. This process is called "porting" the number to the new carrier. The FCC currently requires all carriers, except wireless carriers, to be LNP-capable in the Boston

Metropolitan area. Wireless carriers are not required to be LNP-capable because the FCC granted them an extension until November 24, 2002. Bell Atlantic has advised the Department that it will achieve LNP statewide by July of this year.

The Department's petition to the FCC for additional authority to mandate other code conservation measures includes requesting the authority to set number assignment guidelines. Currently, those guidelines are controlled by Lockheed. Thus, the FCC must first delegate authority to the Department before the Department can revise these guidelines.

III. SUMMARY OF THE DEPARTMENT'S CONSERVATION INVESTIGATION

The following is a chronological summary of the Department's conservation investigation:

- On January 23, 1997, the Department ordered a geographic split of the 617 and 508 area codes to create two new area codes, 781 and 978, to be fully implemented beginning May 1, 1998. From September 1, 1997, to February 1, 1998, Bell Atlantic used a permissive dialing period which allowed calls to be completed using either the old or the new area codes.
- On March 4, 1998, the NANPA Code Administrator for Massachusetts, Lockheed, notified the Department that, because of an unexpectedly high demand for new exchange codes, the 508 and 617 area codes were again in jeopardy of exhausting the available supply of exchange codes.
- On April 3, 1998, Lockheed convened a meeting of the Massachusetts telecommunication carriers to discuss rationing of the remaining exchange codes.
- On April 16 and 17, 1998, Lockheed held industry meetings to discuss relief plans for the 508 and 617 area codes.
- On April 24, 1998, the Department opened D.T.E. 98-38, an investigation into code conservation measures to evaluate ways to delay the need to introduce new area codes in Eastern Massachusetts. On the same date, the Department filed comments with the FCC supporting the Connecticut Department of Public Utility Control's petition for a technology-specific overlay to conserve exchange codes.

- On May 1, 1998, mandatory dialing of the new 781 and 978 area codes was required to complete calls to these area codes.
- On May 12, 1998, Lockheed notified the Department that the new 781 and 978 area codes were also in a jeopardy condition.
- On May 18, 1998, Lockheed filed its relief plans for the 508 and 617 area codes.
- On May 20, 1998, the Department conducted a public hearing in D.T.E. 98-38 and accepted comments from the public and carriers, acknowledged the intervention of the Attorney General, and granted intervenor or limited participant status to several carriers within the telecommunication industry.⁽¹⁵⁾
- On June 1, 1998, the Department held a technical conference with Lockheed to discuss whether virtual pooling as proposed by Lockheed would be useful in extending the lives of the existing area codes in Eastern Massachusetts. Under virtual pooling, carriers would divide exchange codes into 1,000 number blocks (e.g., NPA-NXX-1XXX) and assign phone numbers from one 1,000 number block at a time, using numbers from the next 1,000 number block only when the current 1,000 number block is nearly exhausted. By preserving as many "free" 1,000 number blocks as possible, virtual pooling serves as a "bridge" until actual number pooling is available. During the technical conference, Jim Deak, Regional Director of NPA Relief Planning for Lockheed, described in detail the information he would need in order to assess whether virtual pooling would, in fact, be useful in extending the lives of the existing area codes. He also suggested that Lockheed would be willing to conduct such an analysis for the Department, if the Department collected the necessary data.
- On June 3, 1998, the Attorney General filed a motion for an emergency ruling to preserve number conservation options for the 508, 617, 781, and 978 area codes by imposing the use of virtual pooling beginning June 1, 1998.⁽¹⁶⁾ On June 8, 1998, the Department issued subpoenas to all carriers and Code Holders requesting the data that Lockheed indicated were necessary to conduct further analysis of virtual pooling. Between June 5 and 12, 1998, the Industry Group filed comments and oppositions to the Attorney General's motion. On June 15 and 16, 1998, members of the Industry Group filed comments on the virtual pooling method as proposed by Lockheed. On June 16, 1998, the Attorney General filed comments on virtual pooling, along with a reply to the Industry Group's comments on

his motion for emergency ruling.

- On July 10, 1998, Lockheed advised the Department in writing that Lockheed no longer was willing to provide its expert opinion on the potential outcome of virtual pooling. Lockheed offered that the Department could pay Lockheed's "Enterprise Unit" to conduct the analysis.
- On July 14, 1998, the Industry Group filed its own virtual pooling proposal ("Industry Proposal") with the Department which was intended to preserve numbering resources through voluntary industry compliance until 1,000 block number pooling ultimately be implemented.⁽¹⁷⁾ On July 23, 1998, the Attorney General presented his comments on the Industry Proposal and submitted a revised proposal. On August 11, 1998, the Department issued a request for public comment on the Industry's Proposal, with comments to be filed no later than August 21, 1998.
- On August 18, 1998, the Department sent a letter to Alan Hasselwander and Ronald Binz, co-chairs of the North American Numbering Council ("NANC"), requesting NANC to direct Lockheed to conduct the virtual pooling analysis in Massachusetts. On September 10, 1998, NANC advised the Department that NANC cannot resolve the dispute with Lockheed concerning the conduct of a virtual pooling analysis. NANC referred the letter to the NANPA Oversight Group for its consideration, which also turned down the Department's request.
- On September 15, 1998, Cellular One, on behalf of the Industry Group, asked the Department to accumulate the answers to Question #2 of the subpoenas provided by the Code Holders. The Industry Group specifically wanted a cumulative tabulation of the answers to Question #2 regarding the number of free 1000s NXX-X code blocks. This information was to be used in discussions with the Attorney General concerning code conservation measures. The Department agreed to provide a tabulation of the answers to Question #2 if the answers had been provided in a usable format. After reviewing the answers provided by the Code Holders, which included the Industry Group as well as other providers, the Department concluded that clarification of the question was necessary due to lack of consistency in responses by the Code Holders.
- On September 17, 1998, the Department issued its Notice of Revised Procedural Schedule and its Second Set of Information Requests on the Industry Proposal ("Second Set") to all parties and the Code Holders. This Second Set sought the information requested by the Industry Group.
- On September 23, 1998, the FCC issued its Pennsylvania Ruling in which it outlined and limited state commission authority to order the

implementation of exchange code conservation methods.

- On October 5, 1998, Lockheed asked the Department to determine whether Lockheed should use a one pool versus two pool approach for rationing exchange codes.
- On October 27, 1998, the Department filed a petition for reconsideration of the Pennsylvania Ruling.
- On October 29, 1998, Lockheed filed its relief plans for the 781 and 978 area codes.
- On November 4, 1998, the Department released the results of the Second Set at the request of the industry and the Attorney General's office of (1) the total number of respondents to the Department's Second Information Request on the Industry Proposal, (2) the total number of free (uncontaminated) 1,000 number blocks available, and (3) the breakdown of those number blocks according to the 508, 617, 781, and 978 area codes. At that time the Department disclosed that at least 5,200,000 telephone numbers has been issued to carriers but were still unused.
- On November 11, 1998, the National Association of Regulatory Utility Commissioners (NARUC) adopted a resolution which stated that NARUC "urges the FCC to eliminate the requirement ... for a State commission to decide upon a specific form of area code relief before it is allowed to impose central office code conservation measures and clarify the authority State commissions and U.S. Territories have to order return of central office codes under appropriate circumstances."
- On November 24, 1998, the Department sent a letter to Lockheed in response to Lockheed's request for the Department's guidance on whether to use one pool or two pools for the rationing of NXX codes in the 508 and 617 area codes. The Department advised Lockheed that, until the FCC revises its Pennsylvania Ruling and ameliorates the Pennsylvania Ruling's effects on state jurisdictional authority, the Department is unable to provide the guidance Lockheed requested.
- On January 11, 1999, the Department opened D.T.E. 99-11 to review alternative area code relief plans proposed by Lockheed for the 508, 617, 781, and 978 area codes in Eastern Massachusetts. The Department conducted five public hearings and a procedural conference between January 28, 1999, and February 11, 1999, in Worcester, Lawrence, Plymouth, Boston, and Wakefield, Massachusetts. On January 19, 1999, Lockheed filed revisions to the May 18, 1998, 508 and 617 area code relief plans.

- On January 25, 1999, the Department issued an order in D.T.E. 98-38 opening an adjudicatory investigation into RCC as a code conservation measure and set forth a procedural schedule. Beginning February 4, 1999, the Department received additional petitions to intervene in the RCC investigation. On February 12, 1999, the Department conducted a procedural conference on RCC and received the Attorney General's First and Second Sets of Information Requests to Bell Atlantic.
- On February 12, 1999, the Department filed a petition with the FCC requesting a waiver of 47 CFR § 52.19 for authority to implement a technology-specific overlay in the 508, 617, 781, and 978 area codes.
- On February 17, 1999, the Department filed a petition for a waiver of 47 CFR § 52.19 for additional code conservation authority for the 508, 617, 781, and 978 area codes. On February 18, 1999, the Department issued a memorandum of procedural schedule, service list, and ground rules for D.T.E. 98-38.
- On February 18, 1999, the Department issued its Third Sets of Information Requests to Bell Atlantic-Massachusetts, the signers of the Industry Proposal, the Attorney General, AT&T, and the Code Holders. These information requests sought use and forecasting information, willingness to voluntarily return unactivated exchange codes, RCC design, effects on local calling areas, local number portability, unassigned number porting, and final jeopardy procedures. On February 18, 1999, the Attorney General issued his Third Set of Information Requests to Bell Atlantic. Since February 24, 1999, the Department has received responses to its Third Sets of Information Requests for D.T.E. 98-38.
- On March 4 and 5, 1999, the Department conducted a technical session on the technical aspects of RCC.
- On March 8, 1999, the Department received copies of the Attorney General's Second Set of Information Requests issued to all current and potential Code Holders. Since March 9, 1999, the Department has received motions for protective treatment of some of the carriers' responses to the Department's information requests. On March 10, 1999, the Department received the Attorney General's Fourth Set of Information Requests to Bell Atlantic. On March 12, 1999, the Department issued its Third Set of Information Requests to Massachusetts Wireless NXX Code Holders.
- On March 19, 1999, Bell Atlantic filed a motion for extension of time in the procedural schedule and filed the direct testimony of Bell Atlantic witness Sean Nestor on RCC. On March 19, 1999, AT&T filed the direct testimony of AT&T witness Dr. Francis R. Collins on RCC. On March 19,

1999, the Department issued its Fourth Set of Information Requests on UNP. On March 22, 1999, the Department issued its Fifth and Sixth Sets of Information Requests to Massachusetts NXX Exchange Code Holders requesting more specific use and forecasting data.

- On March 29, 1999, the Department issued a hearing officer ruling revising the procedural schedule and setting the evidentiary hearings for June 21-25, 1999. The procedural schedule was revised and hearings will be held November 16-19, 1999. On March 29, 1999, the Department received comments on whether RCC will delay or prevent the need to introduce new area codes under D.T.E. 98-38. On March 30, 1999, the Attorney General issued his Fifth Set of Information Requests to Bell Atlantic.
- On April 2, 1999, the Department filed comments with the FCC supporting New York's petition for additional code conservation authority.
- On April 16, 1999, the Department filed reply comments with the FCC on the Department's petition for additional code conservation authority.
- On April 30, 1999, the Department filed comments with the FCC supporting Maine's petition for additional code conservation authority.
- On May 3, 1999, Lockheed filed updated area code exhaust dates which reflect the return of 164 exchange codes from Level 3 Communications and which assume the current code rationing procedures remain in place.
- On May 4, 1999, the Department sent a letter to the Code Holders asking them to retain the current rationing procedures and to return unused exchange codes.
- On May 10, 1999, the Department filed supplemental comments with the FCC requesting the FCC to order Lockheed to retain the current rationing procedures.
- On May 10, 1999, the Department filed supporting comments to the Florida petition for additional code conservation authority.
- On May 26, 1999, Lockheed released its 1999 COCUS estimated exhaust dates for the four area codes in Eastern Massachusetts.
- On June 1, 1999, the Department suspended the procedural schedule in light of Lockheed's revised exhaust date estimates.

- On June 11, 1999, the Department filed supporting comments to the California petitions for additional code conservation authority and for a technology-specific overlay.
- On June 18, 1999, the Department sent a delegation to Washington, D.C. to meet with the FCC, the CCB, and the Massachusetts Congressional delegation on area code issues.
- On June 28, 1999, the Department ordered Bell Atlantic to conduct a feasibility study on the Attorney General's two rate center consolidation plans. The Department also issued a revised procedural schedule, which includes a July 13, 1999, technical session on the feasibility study and evidentiary hearings on November 16-19, 1999.

IV. CONCLUSION

The Department is continuing its code conservation investigation into RCC, virtual pooling, number assignment guidelines, and other code conservation measures. Realistically, however, the Department will need an additional grant of authority from the FCC before the Department can mandate conservation measures like unassigned number porting and thousand block number pooling. The Department will continue its efforts to obtain additional authority through its FCC petitions as well as by supporting the petitions of other jurisdictions.

Although the code exhaust dates have been pushed back to the year 2001, the Department is

aggressively investigating all avenues to conserve exchange codes and extend the dates for implementing new exchange codes within the Commonwealth.

Respectfully submitted,

Massachusetts Department of

Telecommunications and Energy

By:

Janet Gail Besser, Chair

James Connelly, Commissioner

W. Robert Keating, Commissioner

Paul B. Vasington, Commissioner

Eugene J. Sullivan, Jr., Commissioner

100 Cambridge Street, 12th Floor

Boston, MA 02202

617-305-3500

1. A rate center is a specific geographic location from which a call's origination and termination points are identified which determines whether a call is rated a local or long distance phone call. Telephone numbers are assigned according to rate centers. In Massachusetts, each rate center is assigned at least one exchange code. Eastern Massachusetts contains 203 rate centers. RCC is intended to reduce the need for area codes by reducing the number of rate centers. Carriers request exchange codes in each rate center where they intend to compete for local telephone service. Most carriers use Bell Atlantic's rate center structure for purposes of obtaining exchange codes. Fewer rate centers would require carriers to request fewer exchange codes, which would extend the lives of the area codes.

2. The previous projected exhaust dates were: 508 area code in second quarter 2000, 617 area code in first quarter 2001, 781 area code in third quarter 2000, and 978 area code in third quarter 2000.

3. NANPA 1999 Central Office Code Utilization Survey.

4. Under current rationing guidelines established by the Industry and administered by Lockheed, carriers submit requests for exchange codes to Lockheed. Lockheed assigns these codes on a lottery basis at the rate of six codes per month for the 508 and 617 area codes, eight codes per month for the 781 area code, and ten codes per month for the 978 area code.

5. NPRM FCC Docket No. 99-122 (rel. May 27, 1999). This NPRM seeks public comment on (1) industry guidelines on number allocation, (2) resource optimization measures like mandatory ten-digit dialing, (3) carrier choice and goals in number usage, (4) pricing mechanisms for allocating number resources, and (5) traditional area code relief methods, including the use of technology-specific overlays.

6. The Pennsylvania Ruling is docketed as In the Matter of the Petition for Declaratory Ruling and Request for Expedited Action on the July 15, 1997 Order of the Pennsylvania Public Utility Commission Regarding Area Codes 412, 610, 215, and 717; Implementation of the Local Competition Provisions of the Telecommunications Act of 1996, CC Docket No. 96-98, FCC 98-224, NSD-L-97-42 (published November 16, 1998, Fed. Reg.).

7. Every telephone number contains ten digits (NPA-NXX-XXXX). The first three digits represent the area code, or NPA code. The second three digits represent the exchange code, or NXX code. The final four digits represent the line number.

8. In virtual pooling, carriers would be assigned (under the current rationing guidelines) full 10,000 number blocks of NXX codes in each rating area where they offer or seek to offer service, but would be required to distribute individual numbers within each such NXX code in a manner designed to maximize the availability of unused 1,000 number blocks. The purpose of virtual pooling is to assure maximum effectiveness of a 1,000

number block NXX-X number pooling arrangement in the event actual number pooling is permitted by the FCC in Eastern Massachusetts.

9. The Department filed a petition for reconsideration of the Pennsylvania Ruling on October 28, 1998 (In the Matter of the Massachusetts Department of Telecommunications and Energy's Petition for Reconsideration of the FCC's September 28, 1998, Opinion (NSD-L-97-42, CC Docket No. 96-98)).⁽¹⁰⁾

10. See Massachusetts Department of Telecommunications and Energy's Petition for Reconsideration of the FCC's September 28, 1998 Opinion, filed October 28, 1998,

NSD-L-97-42, CC Docket No. 96-98.

11. The Department's technology-specific overlay petition is docketed as In the Matter of the Massachusetts Department of Telecommunications and Energy's Petition for Waiver to Implement a Technology-Specific Overlay in the 508, 617, 781, and 978 Area Codes (NSD-L-99-17, DA 99-460, CC Docket 96-98).

12. The Department's code conservation petition is docketed as In the Matter of the Massachusetts Department of Telecommunications and Energy's Petition for Waiver of Section 52.19 to Implement Various Area Code Conservation Methods in the 508, 617, 781, and 978 Area Codes (NSD-L-99-19, DA 99-461, CC Docket 96-98).

13. The Department filed supporting comments on petitions for code conservation filed by New York, Maine, Florida, and California.

14. See fn. 5.

15. The interveners now include Sprint Spectrum L.P., d/b/a Sprint PCS, Bell Atlantic Mobile, MCI Telecommunications Corporation, now MCI WorldCom, Bell Atlantic-Massachusetts, AT&T Communications of New England, Inc., Wireless PCS, Inc., a wholly-owned subsidiary of AT&T Wireless Services, Inc., d/b/a AT&T Wireless Services, Southwestern Bell Mobile Systems, Inc., d/b/a/ Cellular One, SAS Security Systems, Nextel Communications of the Mid-Atlantic, Inc., Omnipoint Communications MB Operations, LLC, RCN-BecoCom, L.L.C., Teleport Communications (now part of AT&T), SNET Cellular, Inc. (now part of Cellular One), Teligent, Inc., MediaOne Telecommunications of Massachusetts, Inc., Sprint Communications, L.P., New England Cable Television Association, Inc., Network Plus, Level 3 Communications (formerly XCOM Technologies), Focal Communications Corporation, Global Naps, Inc., New England Voice and Data of Massachusetts, and CTC Communications Corporation.

16. Currently, Lockheed assigns telephone numbers in blocks of 10,000 numbers for each rate center in which a carrier wishes to conduct business, regardless of the actual numbers needed. Under the virtual pooling approach, numbers would be assigned to carriers in blocks of 1,000 numbers (e.g., NPA-NXX-1XXX), rather than 10,000 numbers (e.g., NPA-NX1-XXXX).

17. RCN and XCOM did not join in the Industry Proposal. Omnipoint, Teligent, and Teleport later joined in the Industry Proposal.